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10/773,571	02/06/2004	Martin E. Thiede	1088.154US02	3554
24113 7590 01/21/2010 PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/773,571

Applicant(s)

THIEDE, MARTIN E.

Examiner

RYAN D. KWIECINSKI

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 7, 10, 13, 14 and 29-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 10, 13, 14 and 29-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 October 2009 has been entered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- a) 86 – upper wall of the attachment bracket
- b) 184 - second plurality of apertures.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

Page 13, line 2, it appears "seat" should be –sit--.

Appropriate correction is required.

Claim Objections

Claims 10 and 44-46 are objected to because of the following informalities:

Claim 10, line 5, "comformingly" appears it should be –conformingly--.

Claims 44-46 must be accompanied by the appropriate claim identifier.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33, lines, 8-9, the recitation "each of the first and second ends of the first and second cross beams is couplable to one of the first and second cross beams" is

vague, indefinite, and confusing. It is unclear how the ends of the cross beams can be coupled to the cross beams. It has been examined as best understood (i.e. the ends of the cross beams are coupled to the first and second main beams).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 36-37 and 41-42 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,871,454 B2 to Coday Sr. et al.

Claim 36.

Coday Sr. et al. disclose a method of assembling a modular floor, the method comprising:

coupling a first main beam to a locking mechanism (main beam 34 is coupled to a locking mechanism 132 by rod 222, Fig.1, 8 and 10), the first main beam presenting a main beam length;

coupling the locking mechanism to a first ground-engaging leg (132 is coupled to leg, Fig.2);

coupling a first cross beam (36, Fig.1) to the first main beam with a first attachment plate (228) such that the first cross beam is substantially transverse to the first main beam length;

sliding the first attachment plate on the first main beam with respect to the first main beam length (226 slides in the channel 202 or 204 of the main beam 34);

supporting a floor panel (22) with a first main beam; and

sliding the floor panel on the first main beam with respect to the main beam length (the floor panel is able to slide on upper flat portion of 34, Fig.11).

Claim 37.

The method of claim 36, further comprising:

coupling a second main beam in registry with the first main beam (the opposite main beam in Fig.1).

Claim 41.

The method of claim 36, further comprising:

coupling a second locking mechanism to the first main beam (the opposite end of the first locking mechanism);

coupling third and fourth locking mechanism to a second main beam (on each end of the second main beam);

coupling the second, third, and fourth locking mechanisms to ground-engaging legs (each locking mechanism 132 is coupled to a ground engaging leg);

coupling the first cross beam substantially transverse to the second main beam length with a second attachment plate (228);

coupling a second cross beam substantially transverse to the first and second main beam length with third and fourth attachment plates (same as the first cross beam and parallel to the first cross beam, Fig.1);

sliding the first and second attachment plate on the first and second main beams, respectively, with respect to the main beam length (the attachment plates 226 and 228 slide into the channels 202 and 204 of the main beams);

sliding the third and fourth attachment plate on the first and second main beams, respectively, with respect to the main beam length (same as the first and second attachment plates);

supporting the floor panel with the second main beam (22); and

sliding the floor panel on the first and second main beams with respect to the main beam length (the floor panel is able to slide upon the flat upper surface of main beams 34).

Claim 42.

The method of claim 36, wherein:

sliding the first attachment plate comprises shifting the first cross beam with respect to the main beam length (the attachment plate is attached to the cross

beam so the cross beam would shift when the attachment plate slides along the main beam length).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 7, 10, 29, 31-35 and 43, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,871,454 B2 to Coday Sr. et al. in view of US 4,676,036 to Bessert.

Claim 1.

Coday Sr. et al. disclose a modular floor comprising:

first and second main beams (34 and the beam collinear with 34, Fig.1), each presenting a main beam length and an upper surface (upper surface of the beam), the upper surface having beam coupling structure (206, 208, 210, Fig.11);

a first cross beam (36, Fig.1);

a first ground-engaging leg (23);

a locking mechanism (132) configured to operably couple the first main beam in registry with the second main beam (both beams are locked into 132), the locking mechanism operably couplable to the first ground-engaging leg (assembled onto the ground engaging leg);

an attachment plate (226, 228, Fig.1) configured to operably couple the first cross beam substantially transverse to the first main beam and slidable (226, 228 are slidable within the channels 202 and 204 of main beams 34) on the first main beam with respect to the main beam length; and

a floor panel (22).

Coday Sr. do not specifically disclose the upper surface of having beam coupling structure and the floor panel having floor coupling structure slidable on the beam coupling structure with respect to the main beam length.

Bessert discloses the upper surface of having beam coupling structure (262a, 262b, 262c, Fig.3) and the floor panel having floor coupling structure (290b, Fig.3) slidable on the beam coupling structure with respect to the main beam length.

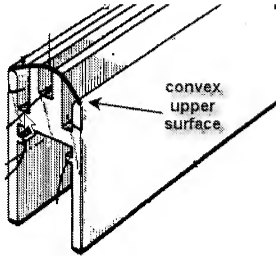
It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the main beams of Coday Sr. with an upper surface

that had beam coupling structure in conjunction with a floor panel that had floor coupling structure that coincided with the beam coupling structure. The connection between the two mating structures will ensure the floor panels are securely connected to the main beams of the modular floor assembly. The mating coupling structures will allow the floor panels to be shifted along the length of the main beams in order to provide easier assembly and disassembly of the modular floor assembly. The mating structures will ensure the floor panels do not disengage with the main beams, forming a structurally sound, secure modular floor.

Claims 2, 7, 10, 29, and 31-32.

Coday Sr. et al. in view of Bessert disclose the modular floor of claim 1:

Regarding claim 2, Bessert discloses wherein the beam coupling structure presents a substantially convex upper surface configured to gravitationally support the floor coupling structure (See figure below).



Regarding claim 7, Coday Sr. disclose wherein the first cross beam includes a main section (224) and an end section (232) the end section comprising a sleeve configured to receive the main section and engagement structure configured to couple with the attachment plate (Column 10, lines 53-56).

Regarding claim 10, Bessert discloses wherein the beam coupling structure of the first main beam comprises first and second rail portions (projections that form 262a and the projections that form 262c), the floor coupling structure of the floor panel configured to conformingly bear upon the first and second rail portions (Fig.5).

Regarding claim 29, Coday Sr. disclose wherein the attachment plate is slidable from the first main beam onto the second main beam without disengaging from the first main beam (the attachment plate will slide in the channel 202 and 204 from one beam to the next beam).

Regarding claim 31, Coday Sr. disclose wherein the first ground-engaging leg is shiftable with respect to the locking mechanism for adjusting a height of the modular floor (24 and 28 are shiftable; 170 and 172 are shiftable; top member 120 is shiftable).

Regarding claim 32, Coday Sr. disclose wherein each of the first and second main beams comprises a post (222, Fig.10) substantially transverse to the main beam length and the locking mechanism comprises a hook (152, 154, 156, 158, Fig.8) configured to releasably engage the post of the first or second main beam.

Claim 33.

Coday Sr. in view of Bessert disclose the modular floor of claim 1, Coday Sr. also disclose further comprising:

- a third main beam (beam across from the first main beam in Fig.1);
 - a second cross beam (the additional cross beam shown parallel to the first cross beam, Fig.1), each of the first and second cross beams having first and second ends (226, 228);
 - a plurality of ground-engaging legs (Fig.1);
 - a plurality of attachment plates (226, 228); and
 - a plurality of locking mechanisms (132 on each ground engaging leg);
- wherein each of the first and second ends of the first and second cross beams is couplable to one of the first and second cross beams with one of the plurality of attachment plates (Fig.1);

each of the first and third main beams is couplable to a pair of the plurality of locking mechanisms (each is connected to 2 locking mechanisms);

each of the plurality of locking mechanisms is couplable to one of the plurality of ground-engaging legs (132 is coupled to each ground engaging leg); and

Bessert discloses the floor panel has additional floor coupling structure (290a, 290b, and the sides opposite 290a and 290b) such that the floor coupling structures are gravitationally supportable by and slidable on the beam coupling structures of the first and third main beams.

Claim 34.

Coday Sr. in view of Bessert disclose the modular floor of claim 33, Coday Sr. discloses wherein the modular floor defines a length and a width (first floor panel, Fig.1), the modular floor length being extendable by coupling additional main beams in registry with the first and second main beams (the locking mechanisms 132 provide four locking hooks, which will allow the system to be expanded in any of the four directions).

Claim 35.

Coday Sr. in view of Bessert disclose the modular floor of claim 34, Coday Sr. disclose wherein the modular floor width is extendable by coupling at least one additional cross beam to a fourth cross beam and the first or third cross beam (the main beams are provided with channel members 202 and 204 on both sides of the main beam allowing the modular floor to be expanded in either of the width directions).

Claim 43.

Coday Sr. et al. disclose a modular floor comprising:

first and second main beams each presenting a main beam length (main beam 34, Fig.1 and the beam opposite the main beam);

a first cross beam (36);

a floor panel (22);

means for coupling the first main beam in registry with the second main beam (cross beam 36 and locking mechanisms 132);

means for coupling the first cross beam substantially transverse to the first main beam (attachment plates 226 and 228);

means for sliding the first cross beam on the first main beam with respect to the main beam length (attachment plates 226 and 228 slide in channels 202 and 204 of the main beams).

Coday Sr. discloses the tops of the main beams are flat which is capable of supporting the floor panels, but does not specifically disclose the main beams having structures as a means for supporting the floor panels.

Bessert discloses means for supporting the floor panel (262a, 262b, and 262c, Fig.3); and

means for sliding the floor panel on the first main beam (290a, 290b, Fig.3) with respect to the main beam length.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the main beams of Coday Sr. with an upper surface that had beam coupling structure in conjunction with a floor panel that had floor coupling structure that coincided with the beam coupling structure. The connection between the two mating structures will ensure the floor panels are securely connected to the main beams of the modular floor assembly. The mating coupling structures will allow the floor panels to be shifted along the length of the main beams in order to provide easier assembly and disassembly of the modular floor assembly. The mating structures will ensure the floor panels do not disengage with the main beams, forming a structurally sound, secure modular floor.

Claim 45.

Coday Sr. in view of Bessert disclose the modular floor of claim 43, Coday Sr. disclose wherein the modular floor defines a length and a width (length and width of the floor panel and beams, Fig.1), the modular floor further comprising:

means for extending the length of the modular floor (the locking mechanisms 132 provide four locking hooks, which will allow the system to be expanded in any of the four directions); and

means for extending the width of the modular floor (the main beams are provided with channel members 202 and 204 on both sides of the main beam allowing the modular floor to be expanded in wither of the width directions).

Claim 46.

Coday Sr. in view of Bessert disclose the modular floor of claim 43, Coday Sr. disclose further comprising:

means for adjusting a height of the modular floor (the legs contain many shiftable parts; 24 and 28 are shiftable; 170 and 172 are shiftable; top member 120 is shiftable).

Claims 13-14 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,871,454 B2 to Coday Sr. et al. in view of US 4,676,036 to Bessert in view of US 2,479,962 to Paulson.

Claim 13.

Coday Sr. in view of Bessert disclose the modular floor of claim 1, Coday Sr. disclose the floor assembly having stabilizer beams but does not specifically disclose wherein the stabilizer beam is pivotally couplable to the first main beam and removably couplable to the ground-engaging leg.

Paulson discloses wherein the stabilizer beam (56, Fig.1) is pivotally couplable to the first main beam (59, 60) and removably couplable to the ground-engaging leg (54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the modular floor of Coday Sr. with a stabilizer

beam in order to increase the structural strength of the completed modular floor assembly. The stabilizer beam will reduce the movement from shear forces on the modular floor and will also keep the floor in with desired shape and form.

Claim 14.

Coday Sr. in view of Bessert in view of Paulson disclose the modular floor of claim 13, Paulson discloses further comprising a second stabilizer beam (55, Fig.10) pivotally couplable to the first cross beam (51, 58) and removably couplable to the first ground-engaging leg (pivotable member on the opposite end of 55).

Claim 44.

Coday Sr. in view of Bessert disclose the modular floor of claim 43, Coday Sr. disclose the floor assembly having stabilizer beams but does not specifically disclose:

means for stabilizing the first ground-engaging leg with respect to the first main beam; and

means for stabilizing the first ground-engaging leg with respect to the first cross beam.

Paulson disclose means for stabilizing the first ground-engaging leg with respect to the first main beam (56, Fig.1); and

means for stabilizing the first ground-engaging leg with respect to the first cross beam (55, Fig.10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the modular floor of Coday Sr. with a stabilizer beam in order to increase the structural strength of the completed modular floor assembly. The stabilizer beam will reduce the movement from shear forces on the modular floor and will also keep the floor in with desired shape and form.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,871,454 B2 to Coday Sr. et al. in view of US 4,676,036 to Bessert in view of US 5,263,296 to Spera.

Claim 30.

Coday Sr. in view of Bessert disclose the modular floor of claim 1, but do not disclose further comprising a brake mechanism configured to substantially prevent shifting of the attachment plate with respect to the first main beam.

Spera discloses further comprising a brake mechanism (110, 113, 114, Fig.20) configured to substantially prevent shifting of the attachment plate with respect to the first main beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the main beam of the floor assembly of Coday Sr. with a brake mechanism in order to prevent the cross beam from shifting in relation to the main beam length. The brake mechanism allows the cross beam to be shifted from place to place and then locked into the desired position. The break mechanism, once

engaged, prevents the cross beam from shifting while the modular floor is in use, etc. which could lead to injuries or damage to the modular floor. The brake mechanism will assist in providing a structurally sound, secure modular floor assembly.

Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,871,454 B2 to Coday Sr. et al.

Claim 38.

Coday Sr. disclose the method of claim 36, Coday Sr. does not specifically disclose sliding the first attachment plate from the first main beam onto the second main beam without disengaging the first attachment plate from the first main beam.

Coday Sr. does disclose that the attachment plate can be slid from the first main beam to the locking mechanism and to the second main beam without disengaging the assembly. The method of Coday Sr. allows the attachment plate to be slid from one main beam to another without physically disengaging the assembly. It would have been obvious to have made the attachment plate wider in order to span the space between the first main beam over the locking mechanism and onto the second main beam.

Claim 39.

Coday Sr. disclose the method of claim 38, further comprising:

shifting the first ground-engaging leg with respect to the locking mechanism to adjust a height of the modular floor (24 and 28 are shiftable; 170 and 172 are shiftable; top member 120 is shiftable).

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,871,454 B2 to Coday Sr. et al. in view of US 5,263,296 to Spera.

Claim 40.

Coday Sr. disclose the method of claim 36, but does not disclose securing the first attachment plate to the first main beam to substantially prevent shifting of the first attachment plate with respect to the first main beam.

Spera discloses further comprising a brake mechanism (110, 113, 114, Fig.20) configured to substantially prevent shifting of the attachment plate with respect to the first main beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the main beam of the floor assembly of Coday Sr. with a brake mechanism in order to prevent the cross beam from shifting in relation to the main beam length. The brake mechanism allows the cross beam to be shifted from place to place and then locked into the desired position. The break mechanism, once engaged, prevents the cross beam from shifting while the modular floor is in use, etc. which could lead to injuries or damage to the modular floor. The brake mechanism will assist in providing a structurally sound, secure modular floor assembly.

Response to Arguments

Applicant's arguments with respect to claims 1, 36, and 43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basil Katcheves can be reached on (571)272-6846. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK
/Ryan D Kwiecinski/
Examiner, Art Unit 3635
/Basil Katcheves/
Primary Examiner, Art Unit 3635

